2013

Annual Bridge Report

King County

Department of Transportation
Road Services

Cover Photo: Alvord T Bridge prior to demolition.

2013
ANNUAL BRIDGE REPORT

Department of Transportation
Road Services Division
King Street Center, KSC-TR-0315
Seattle, WA 98104-3856
206-477-3601 TTY Relay: 711
www.kingcounty.gov/roads

Rick Brater, P.E.
County Road Engineer

August 2014

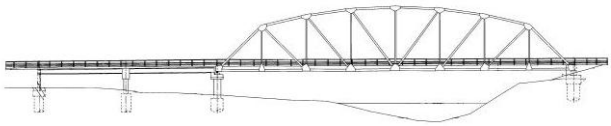
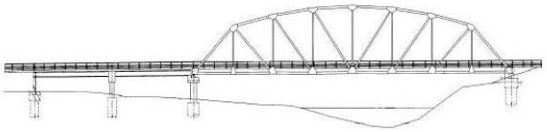
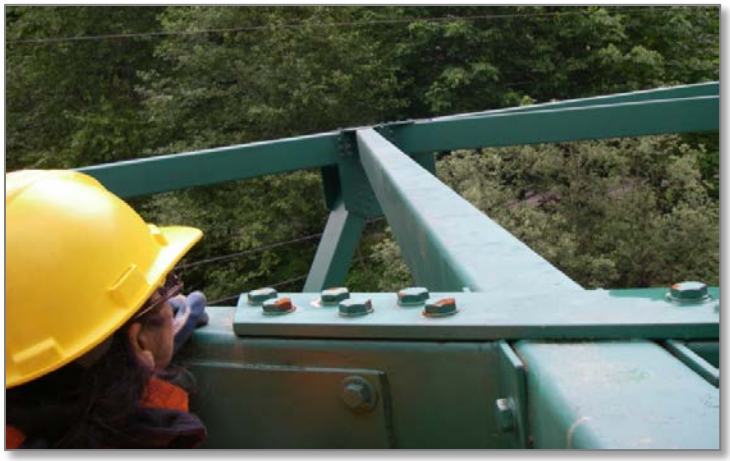


TABLE OF CONTENTS



I. INTRODUCTION

This bridge report is prepared by the King County Department of Transportation's (DOT) Road Services Division (RSD) each year to fulfill the requirements of Washington Administrative Code (WAC) 136-20-060. This WAC requires the County Road Engineer's report of bridge inspections as follows:



Fracture Critical inspection of Smith Parker Bridge No. 615A

"Each County engineer shall furnish the County legislative authority with a written resume of the findings of the bridge inspection effort. This resume shall be made available to said authority and shall be consulted during the preparation of the proposed six-year transportation program revision. The resume shall include the County engineer's recommendations as to replacement, repair or load restriction for each deficient bridge. The resolution of adoption of the six-year transportation program shall include assurances to the effect that the County engineer's report with respect to deficient bridges was available to said authority during the preparation of the program."

This report summarizes the County's 2013 bridge programs, inspections, activities, and findings. These programs form an integrated and comprehensive strategy to maintain and preserve the County's bridges and the continuity of the roadway network. The three main bridge program goals are:

1. Keep the bridges open and safe for public use.
2. Preserve bridge infrastructure by maximizing its useful life through active maintenance, retrofitting, and rehabilitation.
3. Replace bridges with reliable new structures when repair or rehabilitation is not feasible.

With limited revenues and many unfunded transportation needs in King County, emphasis is placed on preserving the existing bridge infrastructure. To the extent financially feasible, repair programs and bridge rehabilitation programs ensure that the useful life of the current bridge inventory is maximized. When repair or rehabilitation is not feasible, replacement, load restrictions or closure are required. Additional information on King County bridges is available at: http://www.kingcounty.gov/kcdot/roads/index.cfm

II. BRIDGE INVENTORY

County engineers inspect and inventory 356 bridges located in all reaches of King County from Vashon Island, to Skykomish and beyond. Of these bridges:

- **177** vehicular bridges are wholly owned by King County.
- **3** bridges are co-owned with other agencies.
- **3** are pedestrian bridges.
- **163** bridges are wholly owned by other agencies and inspected under contract.
- **10** bridges are owned by King County Department of Natural Resources and Parks (DNRP). The RSD inspects and inventories these DNRP bridges because the bridges span above public roadways or the bridges are conveying traffic on a public roadway within a park.

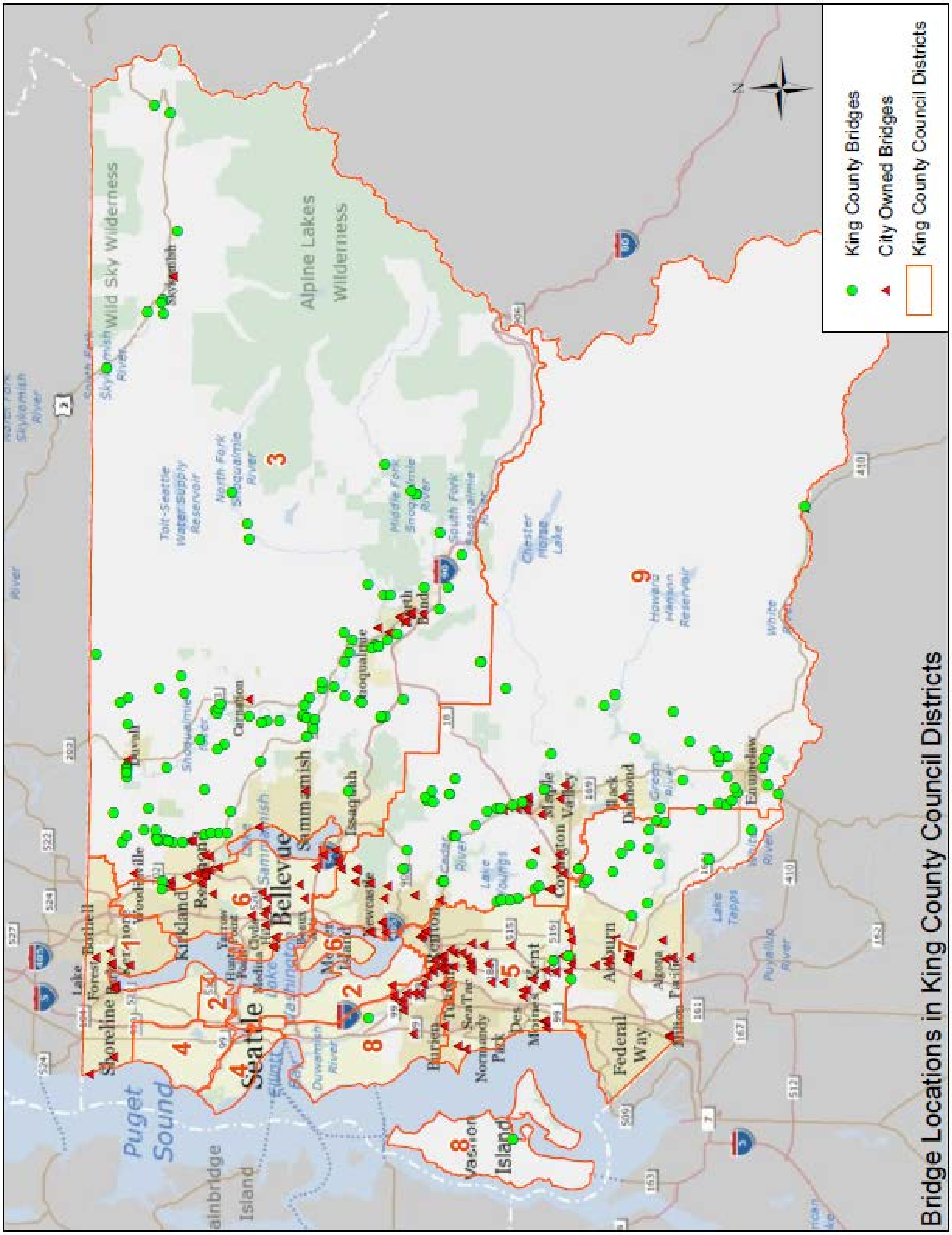
Throughout the report, several references are made to specific bridges, each of which is uniquely identified by name and number, e.g., **Lake Dorothy Bridge No. 359B.** In order to assist the reader, the complete bridge inventory and location descriptions are included in Appendix One.

Consistent with the Revised Code of Washington (RCW) Chapter 39.34, the Interlocal Cooperation Act, the County shares costs in maintaining or replacing bridges that are jointly owned with other agencies under the provisions of interlocal agreements.

The County also performs contract work on city-owned bridges for those cities that lack the resources and expertise to inspect or maintain their own bridge inventory.

The following map illustrates the distribution of the County-owned, partially County-owned, and city-owned roadway bridges throughout the County, in each council district.

Routine Fracture Critical Inspection with Under Bridge Inspection Truck at Novelty Bridge No. 404B


Bridge Locations in King County Council Districts
King County Bridges
City Owned Bridges
King County Council Districts
Alpine Lakes Wilderness
Wild Sky Wilderness
Puget Sound
Seattle
Bellevue
Kirkland
Redmond
Sammamish
Issaquah
Snoqualmie
North Bend
Carnation
Duvall
Woodinville
Bothell
Shoreline
Renton
Tukwila
SeaTac
Burien
Normandy Park
Des Moines
Kent
Auburn
Federal Way
Enumclaw
Black Diamond
Maple Valley
Covington
Vashon Island
Newcastle
Mercer Island
Skykomish
Chester Morse Lake
Howard Hanson Reservoir
Lake Washington
Lake Sammamish
White River
Green River
Cedar River
Puyallup River
Bainbridge Island

III. BRIDGE INSPECTION FINDINGS AND REPAIRS

A. BRIDGE INSPECTION FINDINGS

The National Bridge Inspection Standards (NBIS) mandate that public agencies inspect and report on all bridges at least once every two years. Under these standards, the County is required to document and report the current condition of each bridge, determine the degree of wear and deterioration, and recommend repairs or needed services. Bridges with deficient conditions, such as bridges with deteriorating timber members, require frequent inspections. A total of 156 routine bridge inspections were conducted in 2013. During these bridge inspections, inspectors made an in-depth evaluation of the condition of the bridge structure and documented any observable defects. When the inspection revealed a deficiency, a maintenance work order was generated and assigned a priority. Urgent structural or safety concerns were promptly addressed. Bridge inspection reports were then catalogued and filed. Several times during the year, updated inspection results were forwarded to the Washington State Department of Transportation's (WSDOT) Highway and Local Programs Division, which in turn verified compliance with the NBIS and reported to the Federal Highway Administration (FHWA).

One measure that provides an overview of the condition of the inventory is a rating factor known as the Sufficiency Rating (SR). The average SR of the entire inventory provides a comparative look at the health of the inventory from one year to the next. The SR is a score calculated for each bridge using a multitude of ratings the inspector assigns to the bridge based on the condition of the various components of the bridge. The geometric layout, safety, traffic volume, and the length of the detour route (in the event of a closure) are also factored into the SR. The SR ranges from zero (a bridge that is closed and cannot carry traffic loads) to 100 (a new bridge with no deficiencies). The average SR over the last ten years for bridges in King County roadways is shown in *Table 1: Sufficiency Rating* on the following page.

Checking the extent of loose asphalt on the timber deck of Coal Creek Bridge No. 3035A

Overall, the SR for the County bridge inventory has varied little over the past years. This is due to the large number of bridges in the inventory, which prevents the benefit of each year's new bridges and new repairs from significantly increasing the SR average. Considering the inventory continues to age, maintaining the current average SR is a significant accomplishment. Nevertheless, the steady upward trend over several years is due to the County's investment in replacing or removing the most deficient bridges while the remainder of the inventory is kept in a state of good repair.

Table 1: Sufficiency Rating

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10 Yr Average
Sufficiency Rating (SR)	**67.1**	**68.2**	**68.3**	**68.7**	**70.4**	**70.1**	**71.5**	**72.0**	**71.1**	**72.3**	**69.9**

B. MAJOR REPAIRS

As bridges begin to age, certain bridge components require repair. The County's maintenance program to repair and replace worn or broken components extends the life of the bridge inventory and corrects any immediate safety deficiencies. The goal of the repairs is to remove hazards and provide for preservation of infrastructure in a cost-efficient manner.

Routine inspection of timber components on Issaquah Creek Bridge No. 1741A

Common repairs include replacing spalled concrete, rotted timber, corroded steel, faulty expansion joints or otherwise deteriorated components of the bridges. Deficiencies needing repair are detailed by the inspecting engineers and tracked in a work-order system. Detailed repair instructions are included to guide maintenance crews in scheduling and implementing repairs. In 2013, maintenance crews completed approximately 25 work orders on the King County bridge inventory. Work-order repairs range in size and complexity from minor rail post damage to major structural improvements. Larger repairs are funded by the Bridge Priority Maintenance (BPM) Program which is funded by the Capital Improvement Program (CIP). Smaller repairs are funded out of the division's operating budget. The following is a description of several of the larger repairs completed in 2013.

Landsburg Bridge No. 3075
This concrete bridge, built in 1982 carries Landsburg Road SE over the Cedar River east of Maple Valley.

About 20% of the concrete deck area had delaminated from the original deck. A major deck repair was needed to curb the frequent maintenance efforts and to protect this bridge from further deterioration. Traffic exerted high impacts on the bridge due to settled bridge approaches and damaged both expansion joints as well.

Expansion joint replacement on Landsburg Bridge No. 3075

Work in 2013 included repairing the delaminated areas, replacing both expansion joints and repaving both roadway approaches. A thin overlay to preserve this bridge deck from further structural deterioration is planned for 2015. Funding of the overlay is pending project approval in the preventative maintenance category from the federal grant Bridge Replacement Advisory Committee (BRAC).

Chipping concrete delaminated areas for patching on Landsburg Bridge No. 3075

Raging River Bridge No. 1008G
This 169-feet long bridge, built in 1962, is located south of Fall City. It carries Preston Fall City Road over the Raging River. The expansion joints had failed and the asphalt overlay was rutted resulting in a rough ride across the bridge. County crews coordinated this repair with the countywide overlay efforts on Preston Fall City Road and a smooth roadway across the bridge was once again restored.

Deck view of the Raging River Bridge No. 1008G

Repairs to the timber rails of Baring Bridge No. 509A

Baring Bridge No. 509A
Built in 1930, this one lane timber suspension bridge provides sole access to the community south of the Skykomish River. The bridge is posted for 10 tons and requires frequent repairs each year. In 2013, several rail sections were replaced and supplemental supports were added to the rotten timber members.

North Fork Bridge No. 122i
Scour repair

This 252-feet long bridge was originally built in 1951. It is located north of City of North Bend and carries 428th Avenue SE over the North Fork of the Snoqualmie River. Over the last decade high flow events have altered the channel in the vicinity of the bridge, threatening one of the main piers. County crews have been closely monitoring the bridge and river since then. In the spring of May 2013, large woody debris caused local scour at the pier, exposing the formerly submerged footing. County crews placed large riprap around the pier to protect it from scouring further, reducing the risk of a potential bridge failure.

Before repair: Underwater view of scoured exposed footing at pier 3 of the North Fork Bridge No. 122i

Riprap protection installed at pier 3 along footing at North Fork Bridge No. 122i

IV. LOAD-LIMITED BRIDGES

The RSD seeks to reduce the number of load-limited bridges in King County to facilitate the unimpeded flow of goods and services, but may no longer be able to due to lack of funding. *Table 2: Load-Limited Bridges,* below, lists the five load-limited bridges in King County.

Table 2: Load-Limited Bridges

Bridge Name	Bridge No.	Action	Planned Construction Completion
Lake Dorothy Overflow	359D	Replacement (temporary bridge installed in 2009)	2014
Deep Creek	364A	No improvements planned	N/A
Baring	509A	No improvements planned	N/A
Miller River	999W	Bridge currently **closed** (no funding available for removal)	TBD
Alvord T	3130	Permanently closed June 2013	Demolished Sept 2013

Mabey Bridge over Lake Dorothy Overflow Bridge No. 359D

Lake Dorothy Overflow Bridge No. 359D
This bridge conveys Southeast Lake Dorothy Road over a tributary known as Lake Dorothy Overflow to the Middle Fork Snoqualmie River. The 38-feet long, 14-feet wide, one-lane bridge was constructed in 1962. The bridge is comprised of five untreated timber logs supported by log cribbing, which is deteriorating due to decay. The allowable load on this bridge was reduced due to the deteriorated state of the timber members. Some other problems include low sufficiency rating, seismic vulnerability (susceptible to damage by earthquake), narrow width, lack of traffic rails, and vulnerability to scour.

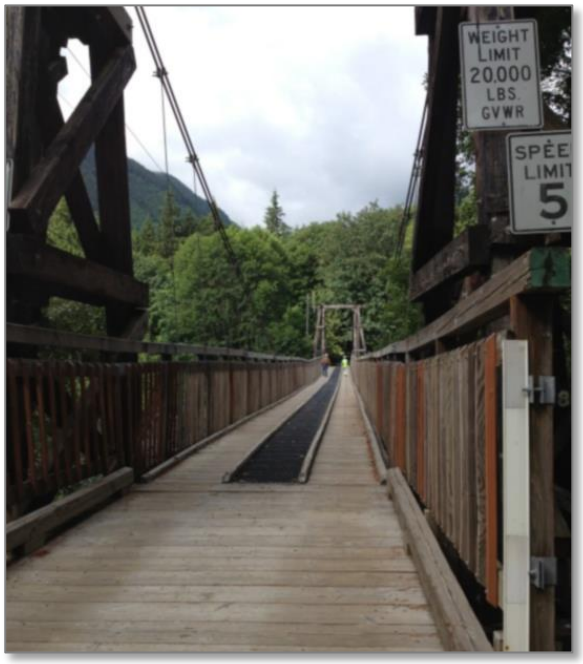
In 2008, King County, Western Federal Lands Highway Division, and the U.S. Forest Service negotiated an agreement for improvements to Southeast Lake Dorothy Road. The U.S. Forest Service placed a temporary steel Mabey bridge over the existing timber bridge, which allowed standard vehicular traffic to cross the bridge. The temporary bridge will stay in place until construction of the new bridge begins in January 2014. The FHWA is providing the funding for this replacement project through the Washington Forest Highway Program. The replacement bridge will be 90-feet long by 24-feet wide bulb-T girder structure supported by concrete-filled steel piles.

Deep Creek Bridge No. 364A
A timber trestle with a timber deck and steel plate girder main span, built in 1965, it is located in the Alpine Wilderness Area, 15 miles north of the City of North Bend. It carries the Fury Lake Road over Deep Creek.

This single lane bridge is structurally deficient and functionally obsolete; it is inspected annually due to the level of deterioration in the timber components. Some other problems include low sufficiency rating, narrow width, and lack of traffic rails.

Currently, the bridge is posted for 22 tons maximum load limit. No plan is in place for replacement of this bridge

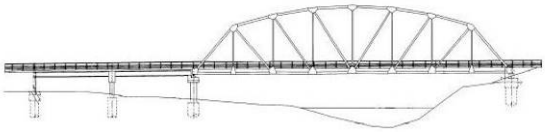
Elevation of the Deep Creek Bridge No. 364A



At the north tower looking south on Baring Bridge No. 509A

Baring Bridge No. 509A
This timber suspension bridge built in 1930, is a King County Landmark and provides sole access to the community south of the Skykomish River. Baring Bridge requires annual inspections and often several repairs each year. Bridge engineers closely monitor the timber towers that support the suspension cables. A feasibility study of this bridge determined the most appropriate course of action for the bridge is a continuation of annual inspections.

Currently, the bridge is posted for 10 tons maximum load limit. No plan is in place for replacement of this bridge, but an adjacent bridge for vehicles is a possibility that would preserve the King County Landmark Bridge for pedestrians.



View at east approach of Miller River Bridge No. 999W

Miller River Bridge No. 999W
Near Skykomish, this 92-year-old steel truss bridge is functionally obsolete and structurally deficient, with a posted load limit of 23 tons for one truck at a time. It has below standard road width at only 16-feet, 9 inches wide. This route had a very low average daily traffic count of less than 100 vehicles. This designated King County Landmark Bridge currently spans part of the Miller River and was used as an alternate route for State Route 2.

The January 2011 flood washed out a culvert located west of the bridge. This created a new 70-feet wide channel across the road 75-feet west of the bridge. The road and bridge are currently closed to all traffic. Due to lack of funding for this project, the bridge will not be replaced. The Federal Emergency Management Agency (FEMA), the Washington State Public Assistance Emergency Management Division, King County, and the public are discussing alternative projects for this area.

Alvord "T" Bridge No. 3130
This Bridge carried traffic across the Green River at 78th Avenue South near the City of Kent. It had a long history of repairs over its 99 year life and had been load limited for 20 years. It was also designated structurally deficient due to the corrosion of the main load carrying members and functionally obsolete due to its narrow roadway, low overhead clearance and substandard rails.

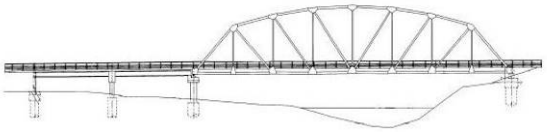
North approach at the site of the removed Alvord "T" Bridge No. 3130

September 2013 demolition of the Alvord "T" Bridge No. 3130

A bridge closure traffic impact analysis in 2010 determined this bridge could feasibly be closed.

The 2013 annual inspection determined the level of deterioration to the steel had brought the bridge to the end of its useful life.

King County permanently closed the bridge in June 2013 and it was removed in September 2013.



V. BRIDGE NEEDS REPORT

The Bridge Needs Report identifies candidate capital projects through application of the King County Priority Process for bridge replacement, approved by the King County Council in 1994 (Ordinance 11693). The priority process establishes relative ranking and prioritizes individual bridge replacements. The process includes scoring the bridges by adequacy, weighing the functional and structural characteristics or deficiencies of each bridge, and assigning a weighting factor to produce a total numerical rating. The results from this priority process are used to program major bridge construction projects. The following pages list the current report in *Table 3: Bridge Needs Report.* Despite the needs listed, no projects are planned and all active projects were suspended due to the lack of funding available for bridges.

The Priority Rating of each bridge changes slowly as it ages and as operational demands increase. Occasionally, a bridge deteriorates more quickly due to a specific event, such as a flood. Consequently, that bridge will receive a much higher Priority Rating, especially if the deterioration requires the bridge to have a posted load limit. If deficiencies are corrected by major improvements to the deteriorated bridge, the Priority Rating will decrease the need to replace the bridge. As traffic volumes increase, the priority score increases because the capacity of the bridge to carry more traffic may be limited by the physical width of the road across the bridge. Due to significant reductions in tax revenue, many projects listed were cut or suspended as of mid-2012 and shown as “to be determined” (TBD), though several have CIP project numbers.

Table 3: Bridge Needs Report

	Bridge No.	Bridge Name (LM) King County Landmark	Priority Rating	CIP No,	Project Start	Const Start	KC Road Tier	Needed Improvements
1	3086OX	Berrydale Overcrossing	58.30	1116545	2000	TBD	1	Replace bridge Project SUSPENDED
2	493C	15 Mile Creek	56.21	N/A	N/A	N/A	1	No improvements planned
3	3035A	Coal Creek	50.33	TBD	TBD	TBD	4	TBD
4	359D	Lake Dorothy Overflow	44.76	TBD	2009	2014	4	Replace bridge under agreement WFL-FHWA
5	509A	Baring Bridge (LM)	44.17	N/A	N/A	N/A	4	No improvements planned
6	999W	Miller River Bridge (LM)	41.64	TBD	2011	TBD	3	Negotiation with FEMA for alternate projects
7	333A	Bear Creek	37.99	100114	2012	TBD	2	Replace bridge Project SUSPENDED
8	364A	Deep Creek	37.96	TBD	TBD	TBD	4	Replace bridge
9	1136E	Woodinville-Duvall	36.42	N/A	N/A	N/A	1	No improvements planned
10	122N	Tate Creek	35.86	200215	TBD	TBD	4	Replace bridge Project SUSPENDED

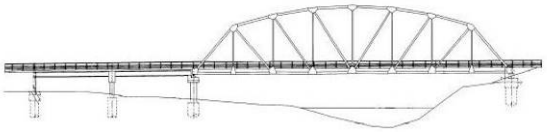


Table 3: Bridge Needs Report - Continued

	Bridge No.	Bridge Name (LM) King County Landmark	Priority Rating	CIP #	Project Start	Const Start	KC Road Tier	Needed Improvements
11	1384A	15 Mile Creek	35.10	TBD	TBD	TBD	1	Replace bridge
12	3085	Covington Creek	36.87	N/A	N/A	N/A	2	No improvements planned
13	1008G	Raging River	34.24	N/A	N/A	N/A	1	No improvements planned
14	3056A	SE 408th Street	33.88	N/A	N/A	N/A	5	No improvements planned
15	1136C	Woodinville-Duvall	35.55	N/A	N/A	N/A	1	No improvements planned
16	1136D	Woodinville-Duvall	33.44	N/A	N/A	N/A	1	No improvements planned
17	1136B	Duvall Slough	33.41	N/A	N/A	N/A	1	Epoxy overlay completed summer 2012
18	3017	Circle Water	32.83	N/A	N/A	N/A	3	No improvements planned
19	3068	Newaukum Creek	32.35	N/A	N/A	N/A	2	No improvements planned
20	3110	Soos Creek	32.21	300113	TBD	TBD	3	Replace Bridge Project SUSPENDED
21	240A	Cottage Lake Creek	31.67	100312	2012	TBD	2	Replace Bridge Project SUSPENDED
22	3038	Veazie Bridge	31.13	TBD	TBD	TBD	2	BPM Project 2014
23	3049	284th Ave SE Bridge	30.97	N/A	N/A	N/A	3	No improvements planned
24	3082	Covington Creek	30.84	N/A	N/A	N/A	1	No improvements planned
25	3202	Maxwell Road	30.64	N/A	N/A	N/A	5	No improvements planned
26	3164	Cedar Grove	30.34	TBD	TBD	TBD	2	TBD
27	3087	Big Soos Creek	30.05	N/A	N/A	N/A	1	No improvements planned
28	3084	Covington Creek	30.02	N/A	N/A	N/A	1	No improvements planned
29	1239A	Upper Preston	29.95	N/A	N/A	N/A	4	No improvements planned
30	3108	Soos Creek	29.95	N/A	N/A	N/A	2	No improvements planned

Funding for rehabilitation or replacement of a bridge occurs primarily through the federal grant Bridge Replacement Advisory Committee (BRAC) program managed by the state. On a two-year cycle, WSDOT provides notice statewide to local agencies issuing a "Call for Bridge Projects" by providing a list of eligible bridges to all County Road Engineers.

Funds are awarded on a competitive basis from applications gathered statewide. Only bridges with an existing length of 20-feet or greater qualify for this program. This funding restriction applies even when the replacement bridge needs to be longer than 20-feet for flood or environmental reasons.

This federal bridge replacement program pays 80 percent of eligible project costs. The decline in tax revenue will make it difficult for the County to fund the 20 percent match; nevertheless, this program will continue to be an important source of funding for King County bridge replacement projects as bridges deteriorate and become competitive in the statewide selection.

VI. BRIDGE CONSTRUCTION IN 2013

Although repairs can prolong the life of a bridge, when a bridge reaches the end of its useful life, it must be extensively rehabilitated, completely replaced, or closed and removed. Capital improvements to a bridge are scheduled when repairs and routine maintenance cannot rectify problems such as inadequate load-carrying capacity. The following bridges were in construction in 2013:

Elevation view of the new 15 Mile Creek Bridge No. 1384B

15 Mile Creek Bridge No. 1384B Bridge Replacement Project

This bridge provides sole access to 240th Avenue Southeast over 15 Mile Creek. The new single span 28-feet wide and 60-feet long bridge replaced the previous 18-feet wide and 30-feet long structurally deficient and functionally obsolete bridge which was originally built in 1969. Not only did this project increase traffic safety and reduce maintenance cost, it also eliminated environmental hazards such as lead paint and submerged creosote treated timber. An increased the hydraulic opening provided better fish habitat and eliminated the risk of scour during flood events. The new bridge is constructed of precast concrete voided slabs and GRS (Geo-synthetic Reinforced Concrete) abutments. It was opened to traffic in November 2013.

Novelty Hill Road Safety Enhancement Project Bridge No. 902

Located east of the City of Redmond, this structure is designed as a 120-feet long and 40-feet wide precast concrete overpass crossing over Northeast Novelty Hill Road, approximately ¼ mile east of Redmond Ridge Drive. The County studied this heavily-traveled corridor, its needed improvements and ways to reduce the number of injuries and potential fatalities caused when drivers collide with animals by providing wildlife a safer way to cross this busy road. Over the past few years, King County has amassed nearly 40,000 infrared images from 12 video cameras situated in forested areas along the Novelty Hill Road corridor. This area is actively used by more than 175 animal species, including bear, cougar, bobcat, coyote, and deer.

Elevation view of the Novelty Hill Road Safety Enhancement Project Bridge No. 902

At least 20 major collisions involving large wildlife have been reported along Novelty Hill Road since 1999 – and it's estimated many more accidents have gone unreported. The Washington State Patrol receives reports of nearly 1,200 human injuries and two fatalities on average each year from vehicle encounters with animals. Nationwide, more than 200 motorists are killed and thousands more are injured in animal-vehicle collisions each year, according to The Wildlife Society. Wildlife fencing with a combination of underpasses and overpasses has been demonstrated to be some of the most effective measures to reduce collisions with large wildlife species. Previous research has shown that wildlife fencing in combination with wildlife under- and overpasses can reduce collisions with large wild ungulates (deer and elk) by 79-97%.

In 2010, the federal government was fully funding projects to address just these types of safety hazards. The crossing and its approach ramps are designed to encourage wildlife to use the structure. The crossing vicinity has 5,615 linear feet of 8-feet tall fencing and 4 wildlife "jump-outs" to guide them toward the crossing. The crossing is near the King County Habitat Network, which consists of 457 continuous miles of protected habitat throughout King County. It is actively used by more than 175 animal species. The crossing is designed to address the growing development and traffic conflicts along Novelty Hill Road between motorists and wildlife where roads intersect wildlife corridors. It enhances motorist safety and preserves viable wildlife corridors.

The project received $5.813 million from the Federal Transportation Enhancement Program for design, right-of-way acquisition, construction and inspection. Construction started in early 2013. The bridge portion of the project was completed in November 2013. The project will be substantially complete April 2014. The one year Plant Establishment period ends December 2014.

VII. FUTURE PLANS

A. BRIDGE REPAIRS

Each year, an average of $375,000 is spent for bridge repairs. Bridge repair needs are prioritized each year and the highest priority repairs are scheduled. Typical repairs include rotted timer replacement, concrete repairs, scour repairs and rail repairs or replacement. Bridge decks are also repaired or rehabilitated under this program. The Cherry Valley Trestle, 267X is the next bridge scheduled for deck improvements.

Roadway approach settlement repairs at Duvall Bridge No. 1136A

B. BRIDGE PAINTING

Stossel Bridge No. 1023A
Paint Project
This steel truss bridge spans the Snoqualmie River on NE Carnation Farm Road; near the city of Carnation It is a designated Landmark bridge, built in 1951. The 20-year-old paint is peeling, rust is forming, and the bridge is being overgrown with algae and fungus.

Elevation view of the Stossel Bridge No. 1023A

This project will remove the existing layers of paint, including some earlier ones that are lead-based; collect and dispose of all waste safely, repair and straighten beams if necessary and repaint the bridge. The bridge will keep its Landmark status and its current green color.

The project has a budget of $975,720 and is funded by a federal bridge grant. The work will require a full closure of the bridge to all but emergency vehicles for two to three months starting in the summer of 2014.

C. SHORT SPAN REPLACEMENTS

Short span Bridge Replacement Program (a multiple year program)
The Short Span Bridge Replacement Program began in 2005 to address the need to replace over 50 bridges with spans less than 20-feet. The intent of this multi-year program is to systematically replace the bridges and protect the transportation network in a cost-effective manner. Two to four bridge replacements per year were programmed in the Capital Improvement Program until 2012 budget cuts. Subsequently, the program has been suspended due to unavailable funds. The program is exclusively county-funded because bridges with spans less than 20-feet do not qualify for federal funding.

Most of the short span bridges range in age from 50 to 80 years old, have been repaired numerous times, are experiencing serious foundation deficiencies, and have reached the end of their useful life. The deficiencies typically include rot in timber supports or undermining of shallow concrete footings by active river scour. Using a programmatic approach, all short span bridges have been evaluated and ranked using the King County Bridge Priority Process. Early years of program implementation used grouping to achieve cost savings. The replacement bridges use similar design elements and as part of the program, a process has been developed to streamline the environmental permitting process to save time and money on both design and construction. The program goals remain unchanged; however, due to the funding shortage, there are no short span bridge replacements in the Roads Capital Program.

D. SOUTH PARK BRIDGE NO. 3179 REPLACEMENT

South Park Bridge No. 3179
<u>New Bridge</u>
The new South Park Bridge in South Seattle consists of two moveable (bascule) leaves forming the main span that opens for vessel traffic in the Duwamish Waterway. The bridge is operated from a control tower housing a mechanical-electrical drive system. The bridge replacement project also provides for protection piers, intersection improvements, roadway and drainage construction, a rain garden, historic and art elements, illumination, riverbank mitigation, utility relocation, and complete removal of the old bridge. Artwork is incorporated into the project through a partnership with 4 Culture. The project also features many parts of the old bridge which were salvaged per a formal agreement with King County's Landmark Commission and the State Office of Historic Preservation.

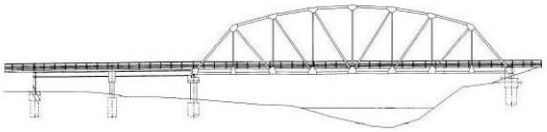
South machinery room South Park Bridge No. 3179

Construction

Contractor Kiewit-Massman (KM) continued construction in 2013 after breaking ground on May 24, 2011. By year end, the main piers were completed and all spans and decks were completed. In May 2013 the massive trunnion frames that support the moveable spans were erected inside the main piers. In the autumn of 2013, the two moveable spans were bolted to the counterweights and balanced. The mechanical and electrical components that operate moveable bridge spans were partially installed. The two control towers were under various stages of construction at the end of the year. Pile driving for fender piers was nearly complete at the end of 2013, and this in-water work was scheduled to be completed by February 15, 2014 as part of permit requirements. As for the old South Park Bridge, all of the south half and the majority of north half have been demolished and hauled away. The in-water pier demolition is also scheduled to be completed by February 15, 2014.

The work in 2013 also included constructing two rain gardens, installing site utilities, restoring two shorelines, and refurbishing salvaged bridge components for art features.

Elevation view during leaf testing on South Park Bridge No. 3179



GLOSSARY OF BRIDGE TERMINOLOGY

Abutment–a substructure supporting the end of a single span or the extreme end of a multispan superstructure and, in general, retaining or supporting the approach fill.

Bascule–a moveable bridge with a counterweight that continuously balances the span, or "leaf," throughout the entire upward swing, providing clearance for boat traffic.

Backwall–the top-most portion of an abutment functioning primarily as a retaining wall to contain approach roadway fill.

Bent–a supporting unit of the beams of a span made up of one or more columns or column-like members connected at their top-most ends by a cap, strut, or other horizontal member.

Bracing–a system of tension or compression members, or a combination of these, connected to the parts to be supported or strengthened by a truss or frame. It transfers wind, dynamic, impact, and vibratory stresses to the substructure and gives rigidity throughout the complete assemblage. Can also refer to diagonal members that tie two or more columns of a bent together.

Cap–the horizontally-oriented, top-most piece or member of a bent serving to distribute the beam loads upon the columns and to hold the beams in their proper relative positions.

Chord–in a truss, the upper-most and lower-most longitudinal members extending the full length of the truss.

Compression–a type of stress involving pressing together; tends to shorten a member; opposite of tension.

Creosote–Oil distilled from coal-tar used as a wood preservative. Because it is harmful to fish, Washington Department of Fish and Wildlife (WDFW) has banned the use of creosote-treated wood in or near shoreline areas.

Corbel–a bracket of brick or concrete that juts out of a wall to support a structure above it.

Deck–portion of a bridge that provides direct support for vehicular and pedestrian traffic.

DywiDag–Bar anchor system used for a variety of applications which include slope stabilization and counteraction of uplift forces.

Elastomeric pads–rectangular pads made of neoprene, found between the sub- and superstructure that bears the entire weight of the superstructure. Elastomeric pads can deform to allow for thermal movements of the superstructure.

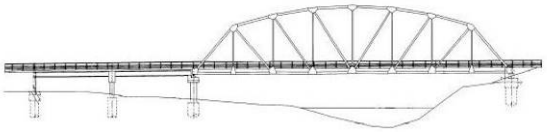
Endwall–the wall located directly under each end of a bridge that holds back approach roadway fill. The endwall is part of the abutment.

Fracture critical member–a member in tension or with a tension element whose failure would probably cause a portion of or the entire bridge to collapse.

Functionally obsolete–is a function of the geometrics of the bridge in relation to the geometrics required by current design standards.

Girder–is the main horizontal support beam of a structure that supports smaller beams. Girders often have an I-beam cross section for strength, but may also have a box shape, Z shape, or other forms.

Pier–a structure comprised of stone, concrete, brick, steel, or wood that supports the ends of the spans of a multispan superstructure at an intermediate location between abutments. A pier is usually a solid structure, as opposed to a bent, which is usually made up of columns.



Pile–a rod or shaft-like linear member of timber, steel, concrete, or composite materials driven into the earth to carry structure loads into the soil.

Pinpile–a series of two-inch-diameter pipes driven in a line into the ground to support the timber planks of a small retaining wall, typically used to prevent erosion under a bridge abutment.

Post or column–a member resisting compressive stresses, in a vertical or near-vertical position.

Riprap - is rock or other material used to armor shorelines, streambeds, bridge abutments, pilings and other shoreline structures against scour, water or ice erosion.

Rutting–is a depression or groove worn into a road or path by the travel of wheels.

Scour–erosive action of removing streambed material around bridge substructure due to water flow. Scour is of particular concern during high-water events.

Short span bridge–one of 57 bridges in the Short span Bridge Program. The characteristics of these bridges are a span less than 20-feet and typically supported by timber piles or shallow concrete footings.

Soffit–the underside of the bridge deck or sidewalk.

Spall–a concrete deficiency wherein a portion of the concrete surface is popped off from the main structure due to the expansive forces of corroding steel rebar underneath. This is especially common on older concrete bridges.

Stringer–a longitudinal beam (less than 30-feet long) supporting the bridge deck and, in large bridges, framed into or upon the floor beams.

Structurally deficient–bridges are considered structurally deficient if significant load-carrying elements are found to be in poor or worse condition due to deterioration and/or damage, or the adequacy of the waterway opening provided by the bridge creates flooding over the bridge deck and adjacent roadway, causing significant traffic interruptions.

Sufficiency rating–the sufficiency rating is a numeric value from 100 (a bridge in new condition) to 0 (a bridge incapable of carrying traffic). The sufficiency rating is the summation of four calculated values: Structural Adequacy and Safety, Serviceability and Functional Obsolescence, Essentiality for Public Use, and Special Reductions.

Substructure–the abutment, piers, grillage, or other structure built to support the span or spans of a bridge superstructure. Includes abutments, piers, bents, and bearings.

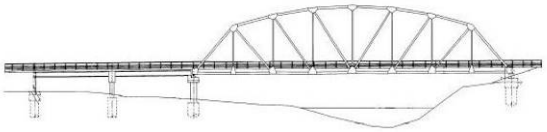
Superstructure–the entire portion of a bridge structure that primarily receives and supports traffic loads and, in turn, transfers the reactions to the bridge substructure; usually consists of the deck and beams or, in the case of a truss bridge, the entire truss.

Tension–type of stress involving an action that pulls apart.

Trestle–a bridge structure consisting of beam spans supported upon bents. Trestles are usually made of timber and have numerous diagonal braces, both within each bent and from bent to bent.

Wheelrail–a timber curb fastened directly to the deck, most commonly found on all timber bridges.

Wingwall–walls that slant outward from the corners of the overall bridge that support roadway fill of the approach.



APPENDICES TO THE 2013 ANNUAL BRIDGE REPORT

Appendix One–Bridge Inventory

Appendix Two –King County Landmark Bridges

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
1	52B	COTTAGE LAKE CK	3	82.52	28	40	2010		NE 165TH ST	COTTAGE LAKE CREEK	
2	52C	BEAR CK	3	83.71	79	123	1995		AVONDALE RD	BEAR CREEK	
3	52D	BEAR CK	3	91.20	30	45	1950		AVONDALE PL NE	BEAR CREEK	
4	52E	BEAR CK BR	3	96.15	84	67	1995		AVONDALE RD	BEAR CREEK	
5	52F	COTTAGE LAKE CK	3	93.84	40	21	1987		NE 159TH ST	COTTAGE LAKE CREEK	
6	52H	COTTAGE LAKE CK	3	98.98	84	48	1994		AVONDALE RD NE	COTTAGE LAKE CREEK	
7	55	BEAR CREEK RANCHETTE	3	PED	6	52	1979		PED PATH @ 194TH	COTTAGE LAKE CREEK	
8	61B	FISH HATCHERY	3	69.42	24	20	1950		SE FISH HATCHERY R	DRAINAGE DITCH	
9	61G	TOKUL CR PARK	3	54.74	26	85	1950		FISH HATCHERY RD	TOKUL CREEK	
10	63	WELCOME LAKE BR	3	87.68	33	32	1984		218TH AVE NE	COLIN CREEK	
11	83B	ISSAQUAH CK	9	75.68	24	40	1952		SE 156TH ST	ISSAQUAH CREEK	
12	83D	ISSAQUAH CK	9	64.02	30	42	1962		CEDAR GROVE RD	ISSAQUAH CREEK	
13	99L	KIMBALL CK	3	47.78	12	45	1960	1973	SE 76TH ST	KIMBALL CREEK	
14	122I	NORTH FORK	3	49.45	26.5	252	1951		428TH AVE SE	N FK SNOQUALMIE RV	
15	122K	NORMAN BR	3	77.93	34	390	1984		428TH AVE SE	M FK SNOQUALMIE RV	
16	122N	TATE CK	3	13.14	24	16	1952		SE 73RD ST	TATE CREEK	
17	124B	124TH ST BR	3	93.50	71	22	1999		NE 124TH ST	DRAINAGE DITCH	
18	124C	NE 124 ST	3	94.37	65	128	2004		NE 124TH ST	SAMMAMISH RIVER	
19	167AOX	RICHMOND BEACH OX	1	73.24	30	53	2011		27TH AVE NW	BNSF RR	Shoreline
20	167C	HIDDEN LAKE	1	51.31	22	312	1931		10TH AVENUE NW	RAVINE	Shoreline
21	180A	EVANS CK	3	62.23	22	23	1917	1953	NE 50TH ST	EVANS CREEK	
22	180L	PATTERSON CK	3	96.25	41.1	67	2012		292ND AVE SE	PATTERSON CREEK	
23	186J	FIRE STATION	3	7.49	33	16	1915		PRESTON FALL CITY	UNIMPROVED UX	
24	225C	YORK BRIDGE	3	92.33	46	220	2006		NE 116TH ST	SAMMAMISH RIVER	KC/Redmond
25	228A	W SNOQUALMIE RV RD NE	3	88.92	28	36	1965		NE 18TH ST	DRAINAGE DITCH	
26	228D	W SNOQUALMIE RV RD NE	3	83.31	24	33	2008		SNOQUALMIE RV RD	DRAINAGE DITCH	
27	228E	PATTERSON CK	3	88.38	28	50	1969		SNOQUALMIE RV RD	PATTERSON CREEK	
28	228F	312 AVE SE	3	7.97	24.3	20	1924	1950	SNOQUALMIE RV RD	DRAINAGE DITCH	
29	234A	RAGING RIVER BR	3	95.98	48.1	200	1998		PRESTON FALL CITY	RAGING RIVER	
30	240A	COTTAGE LAKE CR	3	57.52	24	18	1951		BEAR CK RD	COTTAGE LAKE CREEK	
31	249A	C.W. NEAL RD	3	9.96	25	30	2007		CW NEAL RD	DRAINAGE DITCH	
32	249B	C.W. NEAL RD	3	62.95	24	16	1951		CW NEAL RD	DRAINAGE DITCH	
33	249C	C.W. NEAL RD	3	55.15	24	20	1951		CW NEAL RD	DRAINAGE DITCH	
34	257Z	HORSESHOE LAKE CK	3	49.68	18.9	18	1930	1969	310TH AVE NE	HORSESHOE LAKE CREEK	
35	264X	SWAMP CK	1	99.37	59	63	2005		73RD AVE NE	SWAMP CREEK	Kenmore
36	264X P	WALLACE SWAMP CK PED	1	PED	9	46	1985		PED TRAIL	SWAMP CREEK	Kenmore
37	264Z1	MCALEER CK	1	64.04	32.3	23	1949		SHORE DRIVE NE	MCALEER CREEK	Lk Forest Pk
38	264Z2	MCALEER CK	1	76.39	32.3	23	1949		45TH AV NE	MCALEER CREEK	Lk Forest Pk
39	264Z3	MCALEER CK	1	64.04	32.3	23	1949		BEACH DRIVE NE	MCALEER CREEK	Lk Forest Pk
40	267X	CHERRY VALLEY TSTL	3	57.59	26	181	1951		315TH WY NE	CHERRY CREEK	

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
41	271AOX	TOKUL CK OX	3	99.85	158	18	1988		TOKUL RD	PEDESTRIAN TRAIL	
42	271B	UPPER TOKUL CR	3	59.22	24	107	1965		TOKUL RD	TOKUL CREEK	
43	333A	BEAR CK	3	33.66	24	20	1950		NE 133RD ST	BEAR CREEK	
44	344A	PATTERSON CK	3	87.40	24	37	2008		310TH AVE SE	PATTERSON CREEK	
45	344B	308TH AVE SE	3	87.45	24	33	2008		308TH AVE SE	PATTERSON CREEK	
46	359A	GRANITE CK	3	78.46	16.5	30	1967		PRIVATE RD	GRANITE CREEK	
47	359B	LAKE DOROTHY BR	3	85.03	31	339	1963		SE LAKE DRTHY RD	MIDDLE FORK SNOQL R	
48	359C	LAKE DOROTHY OVRFL BR	3	74.85	33	20	1963		SE LAKE DRTHY RD	OVERFLOW	
49	359D	LAKE DOROTHY OVRFL BR	3	52.33	16	60	1962		SE LAKE DRTHY RD	OVERFLOW	
50	359U	LAKE DOROTHY SLIDE	3	86.23	8	41	2011		SE LAKE DOROTHY RD	HILL SIDE SEEPAGE	
51	364A	DEEP CK	3	43.57	20	109	1912	1965	NORTH FORK RD SE	DEEP CREEK	
52	364B	WAGNERS BR	3	92.48	19.9	175	2008		NORTH FORK RD SE	N FK SNOQUALMIE RIVER	
53	364C	SUNDAY CK	3	78.91	23.7	105	2010		NORTH FORK RD SE	SUNDAY CREEK	
54	368B	MAY CK BR	9	9.89	82	290	2009		COAL CREEK PRKWY	MAY CREEK	Newcastle
55	368C	MEADOWVIEW PARK	9	93.97	36	210	2002		150TH PL SE	WETLAND	Newcastle
56	404B	NOVELTY	3	87.35	47.2	623	2000		NE 124TH ST	SNOQUALMIE RIVER	
57	427I	CHERRY CK BR	3	8.50	28	101	1960		NE CHERRY VLY RD	CHERRY CREEK	
58	480A	BEAR CK	3	39.51	24	20	1951		NE 116TH ST	BEAR CREEK	
59	493B	BANDARET	9	88.84	43.2	101	2009		SE MAY VALLEY RD	ISSAQUAH CREEK	
60	493C	FIFTEEN MILE CK	9	43.45	3.9	38	1932	1973	SE MAY VALLEY RD	FIFTEEN MILE CREEK	
61	506A	MONEY CK BR	3	76.94	16.5	220	1958		NE MONEY CREEK RD	MONEY CREEK	
62	509A	BARING BR	3	1.43	1.5	340	1930	1952	NE INDEX CK RD	SKYKOMISH RIVER-S FORK	
63	578A	EVANS CK	3	65.61	24	20	1950		REDMND-FALL CITY	EVANS CREEK	
64	593C	MAY CK	9	7.10	24	16	1951		164TH AVE SE	MAY CREEK	
65	615A	SMITH PARKER BR	3	94.81	38	125	1998		328 WY SE	RAGING RIVER	
66	617B	EDGEWICK	3	81.25	39	213	2004		468TH AVE SE	S FK SNOQUALMIE RIVER	
67	682A	PRESTON BR	3	99.99	30	243	2003		SE 86TH ST	RAGING RIVER	
68	891A	KIMBALL SUPER SPAN	3	97.54	88	25	1971		384TH AVE SE	KIMBALL CREEK	
69	896A	ROCK CK BR	9	8.33	20	61	1994		SE 208TH ST	ROCK CREEK	
70	896B	KERRISTAN BR	9	71.20	15	22	1996		208TH SE	RAGING RIVER	
71	896C	KERRISTAN BR	9	71.08	15	32	1996		208TH SE	RAGING RIVER	
72	901	REDMOND RIDGE UPD	3	94.45	46	195	2001		REDMOND RIDGE NE	WETLAND	
73	909B	CLOUGH CK	3	47.53	24.3	16	1951		SE 141ST ST	CLOUGH CREEK	
74	916A	W SNOQUALMIE RIVER RD	3	55.95	24	20	1951		W SNOQUALMIE RV RD	SLOUGH	
75	920A	RUTHERFORD SLOUGH	3	84.44	27	30	2007		SE 39TH PL	RUTHERFORD SLOUGH	
76	927B	PATTERSON CK	3	57.08	14	21	1951	1973	300TH AVE SE	PATTERSON CREEK	
77	952A	EVANS CK	3	96.06	68	69	2013		NE UNION HILL RD	EVANS CREEK	
78	952B	EVANS CK	3	65.53	24	32	1913		196TH AVE NE	EVANS CREEK	
79	952C	E REDMOND	3	69.57	24	23	1913		196TH AVE NE	EVANS CREEK	
80	952D	195TH AVE NE	3	99.58	52	46	2012		195TH AVE NE	TRIBUTARY	

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
81	999K2	SCENIC BR	3	71.74	21	61	1960		COUNTY RD	TYE RIVER	
82	999W	MILLER RIVER BR (closed)	3	16.23	19.8	228	1922		OLD STVNS PASS HWY	MILLER RIVER	
83	999X	CASCADE SCENIC HWY	3	62.12	24	22	1950		CASCADE SCENIC HWY	MILLER RIVER SLOUGH	
84	999Z	SKYKOMISH RIVER	3	84.35	27.7	255	1957		MONEY CREEK RD	SKYKOMISH RIVER	
85	1000	TYE RIVER PED BR	3	PED	6	80	1996		OLD CASCADE HWY	TYE RIVER	
86	1008E	RAGING RIVER	3	83.75	28	50	1915		SE 68TH ST	RAGING RIVER	
87	1008G	RAGING RIVER	3	79.07	36	169	1962		PRESTON FALL CITY	RAGING RIVER	
88	1014B	OVERLAKE DR	6	54.81	24	61	1951	1968	OVERLAKE DR	DEPRESSION	Medina
89	1014C	OVERLAKE DR	6	54.81	24	61	1951	1968	OVERLAKE DR	DEPRESSION	Medina
90	1018B	ROCK CK BR	9	41.03	26	19	1916		ROBERTS RD	ROCK CREEK	Black Diamond
91	1023A	STOSSEL BR	3	43.24	27.7	330	1951		NE CARNATION FARM	SNOQUALMIE RIVER	
92	1052A	SYLVESTER RD	8	8.51	32	225	2012		SYLVESTER RD SW	FOX CREEK	Normandy Pk
93	1056B	BEAR CK	3	65.98	45	20	1915		WOODINVILLE-DUVALL	BEAR CREEK	
94	1071AE	EAST KENMORE BR	1	66.26	33.5	590	1970		JUANITA DRIVE	SAMMAMISH RIVER	Kenmore
95	1071AW	WEST KENMORE BR	1	25.21	33.5	590	1938		JUANITA DRIVE	SAMMAMISH RIVER	Kenmore
96	1086A	KIMBALL CK	3	8.26	27	43	1929	1965	SE 80TH ST	KIMBALL CREEK	
97	1086B	COAL CK	3	59.28	24	16	1950		378TH AVE SE	COAL CREEK	
99	1111-1	MILLER CK	8	84.91	39	15	1960		13TH AVE SW	MILLER CREEK	Normandy Pk
100	1116A	BRISSACK BR	3	74.07	33.5	266	1971		436TH AVE SE	S FK SNOQUALMIE	
101	1135-1	NORTH BEND #1	3	78.45	24.5	20	1951		BOALCH AVE	DRAINAGE DITCH	North Bend
102	1135-2	NORTH BEND #2	3	95.96	27	88	2006		NW 8TH ST	OVERFLOW CHANNEL	North Bend
103	1135-3	NORTH BEND #3	3	64.57	58	467	1941		W NORTH BEND WY	S FK SNOQUALMIE RV	North Bend
104	1135-4	NORTH BEND #4	3	82.85	56.3	164	1941		W NORTH BEND WY	OVERFLOW CHANNEL	North Bend
105	1135-5	NORTH BEND #5	3	88.93	69.3	22	1989		SW MT SI BLVD	RIBARY CREEK	North Bend
106	1135-6	NORTH BEND #6	3	33.66	25	16	1951		ALM WY	SLOUGH	North Bend
107	1135-7	NORTH BEND #7	3	67.71	58	56	1941		W NORTH BEND WY	SLOUGH	North Bend
108	1136A	DUVALL BR	3	69.29	29.5	1182	1951	2002	WOODINVILLE-DUVALL	SNOQUALMIE RIVER	KC/Duvall
109	1136B	DUVALL SLOUGH	3	65.03	26.5	639	1948		WOODINVILLE DUVALL	DUVALL SLOUGH	
110	1136C	WOODINVILLE-DUVALL RD	3	54.50	26.5	90	1948		WOODINVILLE DUVALL	DUVALL SLOUGH	
111	1136D	WOODINVILLE-DUVALL RD	3	55.44	26.5	70	1948		WOODINVILLE DUVALL	DUVALL SLOUGH	
112	1136E	WOODINVILLE-DUVALL	3	51.72	26.5	50	1948		WOODINVILLE DUVALL	DUVALL SLOUGH	
113	1239A	UPPER PRESTON	3	36.93	24	60	1950		UPPER PRESTON RD	ECHO LAKE CREEK	
114	1320A	AMES LAKE TSTL	3	51.61	26	168	1924	2003	AMES LK CARNATION	AMES LAKE CREEK	
115	1384A	FIFTEEN MILE CK	9	49.47	25.3	64	1949		FIFTEEN MILE CREEK	FIFTEEN MILE CREEK	
116	1384B	15 MILE CK	9	94.14	30	63	2013		240TH AVE SE	15 MILE CREEK	
117	1413B	SOUTH FORK KIMBALL CK	3	66.39	25.5	16	1954		MEADOWBROOK RD	KIMBALL CR	Snoqualmie
118	1413C	EAST FORK KIMBALL CK	3	59.97	25.5	16	1954		MEADOWBROOK RD	KIMBALL CREEK	Snoqualmie
119	1726A	MEADOWBROOK BR	3	81.56	19	386	1921	2005	MEADOWBROOK WY SE	SNOQUALMIE RIVER	Snoqualmie
120	1741A	ISSAQUAH CK	9	49.01	24	54	1951	1974	252 AVE SE ISSAQ	ISSAQUAH CREEK	
121	1834A	TOLT BR	3	91.01	46	962	2008		NE TOLT HILL RD	SNOQUALMIE RIVER	

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
122	2133A	SIKES LAKE TSTL	3	48.42	24	260	1978		284 AVE NE	SIKES LAKE	
123	2158-1	TOLT PIPE LINE	3	PED	12	200	1999		CEDAR RIVER TRAIL	155TH AVE NE	KC Parks
124	2178-29	CEDAR RIVER TRAIL #29	3	PED	80.8	96	1922		CEDAR RIVER TRAIL	NE 32ND ST	KC Parks
125	2266-2	CEDAR RIVER TRAIL #02	9	PED	110.8	77	1908		CEDAR RIVER TRAIL	SE 208TH ST	KC Parks
126	2266-3	CEDAR RIVER TRAIL #03	9	PED	110.8	77	1908		CEDAR RIVER TRAIL	SE 213TH ST	KC Parks
127	2266-5	CEDAR RIVER TRAIL #05	9	PED	110.8	96	1935		CEDAR RIVER TRAIL	WITTE RD SE	KC Parks
128	2266-7	CEDAR RIVER TRAIL #07	9	PED	110.8	37	1925		CEDAR RIVER TRAIL	WITTE RD SE	KC Parks
129	2266-8	CEDAR RIVER TRAIL #08	9	PED	110.8	268	1912		CEDAR RIVER TRAIL	SE 232ND ST	KC Parks
130	2266-9	CEDAR RIVER TRAIL #09	9	PED	110.8	62	1920		CEDAR RIVER TRAIL	UPPER DORRE DON WY SE	KC Parks
131	2266-11	CEDAR RIVER TRAIL #11	9	PED	12	80	2003		CEDAR RIVER TRAIL	SE 248TH ST	KC Parks
132	2550A	MT SI BR	3	75.00	46	365	2008		MOUNT SI RD	M FK SNOQUALMIE RV	
133	2605A	FOSS RIVER	3	49.14	17.3	120	1951		FOSS RIVER RD	FOSS RIVER	
134	3005	HYLEBOS CK	7	68.28	24	16	1951		S 373RD ST	HYLEBOS CREEK	Federal Way
135	3005A	HYLEBOS CK	7	73.05	32	35	2006		S 373RD ST	HYLEBOS CREEK	Federal Way
136	3014	NEELY BR	7	78.75	33.4	240	1970		AUBURN-BLK DND	GREEN RIVER	
137	3015	PATTON BR	7	41.09	30	430	1950		SE GREEN VALLEY RD	GREEN RIVER	
138	3017	CIRCLE WATER BR	7	57.14	28	47	1926	1965	SE GREEN VALLEY RD	BURNS CREEK	
139	3020	GREEN VALLEY RD	7	63.76	24	20	1950		SE GREEN VALLEY RD	DRAINAGE DITCH	
140	3022	GREEN VALLEY RD	7	54.15	24	20	1954		SE GREEN VALLEY RD	DRAINAGE DITCH	
141	3024	FLAMING GEYSER	9	87.20	49.3	362	1991		228 PLACE SE	GREEN RIVER	
142	3025	WHITNEY BR	7	96.81	4.8	250	1990		212TH WY SE	GREEN RIVER	
143	3027	WHITNEY HILL	9	98.95	37	63	2000		212TH WY SE	NEWAUKUM CREEK	
144	3030	SE 380 ST	9	65.69	24	16	1950		SE 308TH ST	SLOUGH	
145	3032	GREEN RIVER GORGE	9	71.97	25	437	1914	1991	FRANKLIN RD	GREEN RIVER	
146	3035A	COAL CK	9	16.12	21	41	1958		LAKE WALKER RD	COAL CREEK	
147	3036	KANASKAT ARCH	9	77.45	25.7	220	1918	1955	CUMBERLND-KANASKAT	GREEN RIVER	
148	3037OX	KANASKAT OXING	9	54.18	24	157	1959		CUMBERLND-KANASKAT	BNSF RR	
149	3038	VEAZIE BR	9	47.04	28.8	56	1950		VEAZIE-CUMBERLAND	COAL CREEK	
150	3040A	NEWAUKUM CK	9	98.44	38	34	2012		284TH AVE SE	NEWAUKUM CREEK	
151	3041	NEWAUKUM CK	9	88.42	33.5	70	1958		SE 416TH ST	NEWAUKUM CREEK	
152	3042	NEWAUKUM CK	9	98.49	38	41	2011		SE 416TH ST	NEWAUKUM CREEK	
153	3043	NEWAUKUM CK	9	97.47	32	40	2009		SE 416th ST	NEWAUKUM CREEK	
154	3049	284 AVE SE BR	9	73.67	24	20	1950		284TH AVE SE	BOISE CREEK	
155	3050A	GREENWATER	9	69.93	20	18	1964	1996	SE 496TH PL	PACKARD CREEK	
156	3050B	GREENWATER	9	75.79	12	110	1973		DRIVE UHLMAN RD E	GREENWATER RIVER	
157	3051	BOISE CK	9	69.06	19	16	1927		276TH AVE SE	BOISE CREEK	
158	3052	BOISE CK	9	67.57	26	19	1927	1959	268TH AVE SE	BOISE CREEK	
159	3055A	BOISE X CONNECTION	9	69.84	22	37	1956		SE MUD MT DAM RD	BOISE CREEK	
160	3056A	SE 408TH ST (closed)	7	25.02	28	17	1915		SE 408TH ST	UNNAMED CREEK	
161	3060	208TH AVE SE	9	82.96	28	16	1951		208TH AVE SE	DRAINAGE DITCH	

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
162	3063	NEWAUKUM CK	9	65.42	24	40	1950		SE 416TH ST	NEWAUKUM CREEK	
163	3064	NEWAUKUM CK	9	85.00	28	47	1928	1997	SE 424TH ST	NEWAUKUM CREEK	
164	3066	NEWAUKUM CK	9	85.37	29.8	49	1927	1955	236TH AVE SE	NEWAUKUM CREEK	
165	3068	NEWAUKUM CK	9	62.13	23.3	32	1928		244TH AVE SE	NEWAUKUM CREEK	
166	3069	NEWAUKUM CK	9	89.60	28.5	24	1939	1957	248 TH AVE SE	NEWAUKUM CREEK	
167	3071	NEWAUKUM CK	9	64.71	28.8	40	1950		SE 424TH ST	NEWAUKUM CREEK	
168	3075	LANDSBURG BR	9	78.11	44	130	1982		LANDSBURG RD	CEDAR RIVER	
169	3082	COVINGTON CK	9	71.11	26	19	1915		ABRN-BLCK DMD RD	COVINGTON CREEK	
170	3084	COVINGTON CK	9	77.27	26	23	1915		ABRN-BLCK DMD RD	COVINGTON CREEK	
171	3085	COVINGTON	9	61.55	26	45	1929		COVINGTON-SWYR RD	JENKINS CREEK	
172	3085P	COVINGTON WAY PED BR	9	PED	10	67	1998		PEDESTRIAN	JENKINS CREEK	
173	3086OX	BERRYDALE OX	7	2.00	25	105	1931	1968	KENT-BLK DMD RD	BNSF RR	
174	3087	BIG SOOS CK	7	57.65	26	36	1931		KENT-BLK DMD RD	BIG SOOS CREEK	
175	3095	SE 215 OVER TAYLOR CR	9	98.72	34.9	105	2005		NORVYDAN RD	TAYLOR CREEK	
176	3096OX	MAPLEVALLEY OX	9	95.21	136	39	1994		SE 216TH WY	PEDESTRIAN TRAIL	
177	3097	DORRE DON WAY	9	63.65	24	20	1945	1959	DORRE DON WY	DRAINAGE DITCH	
178	3099	MAXWELL RD	9	7.15	24	20	1939	1951	225TH AVE SE	GEM CREEK	
179	3099A	JEM CK	9	79.35	25.5	22	1989		SE 206TH ST	JEM CREEK	
180	3106	SOOS CK	9	97.70	36	40	2009		148TH AVE SE	SOOS CREEK	
181	3108	SOOS CK	9	7.39	38	31	1971		148TH AVE SE	SOOS CREEK	
182	3109	SOOS CK	9	65.21	24	16	1949		SE 224TH ST	SOOS CREEK	
183	3109A	SOOS CK	9	64.42	20	15	1959		SE 216TH ST	SOOS CREEK	
184	3109B	LAKE YOUNG'S WAY	9	71.27	40	16	1969		SE LK YOUNGS WY	SOOS CREEK	
185	3110	SOOS CK	9	69.81	21.5	15	1928		SE 208TH ST	SOOS CREEK	
186	3126	SE 277TH ST	7	6.75	64	16	1950	1973	SE 277TH ST	SLOUGH	
187	3130	ALVORD "T" (Closed 5-2013)	7	4.00	19.5	275	1914	1970	S 3RD AVE KENT	GREEN RIVER	
188	3139	SALTWATER STATE PARK	5	53.61	31.1	570	1934		MARINE VIEW DR	SALTWATER STATE PARK	Des Moines
189	3142	NORTH TWIN	5	44.39	33	212	1951	2011	16TH AVE S	MCSORLEY CREEK	Des Moines
190	3143	SOUTH TWIN	5	77.51	31.5	375	1951	1996	16TH PL S	MCSORELY CREEK	Des Moines
191	3145A	MILLER CK	5	98.05	52	53	2005		S 156TH WY	MILLER CREEK	Sea Tac
192	3164	CEDAR GROVE	9	61.72	30	180	1962		CEDAR GROVE RD	CEDAR RIVER	
193	3165	CEDAR MOUNTAIN	9	99.17	52	291	2003		SE JONES RD	CEDAR RIVER & TRAIL	
194	3165A	CEDAR MT RAMP	9	9.51	3.3	19	2003		CEDAR MT PLACE SE	CEDAR RIVER TRAIL	
195	3166	ELLIOTT BR	9	71.71	49	406	2005		154TH PLACE SE	CEDAR RIVER	
196	3166A	ELLIOT BIKE/PED XING	9	91.70	60	18	2005		154TH AVE SE	PEDESTRIAN TRAIL	
197	3176	PETER WESTERN	8	69.42	32	181	1950		S 116TH ST	DRAINAGE DITCH-RELIEF	Burien
198	3176A	PUGET S0. HS OX	8	PED	6	192	1959	1996	PEDESTRIAN OX	1ST AVE S	Burien
199	3179	SOUTH PARK BR	8	IN CONSTRCTION OPEN IN 2014					14/16TH AVE S	DUWAMISH RIVER	
200	3184	JUDD CK	8	52.67	29.8	370	1953		VASHON HWY SW	JUDD CREEK	
201	3188	NEWAUKUM CK	9	78.59	78.4	24	1927		SE 400TH ST	NEWAUKUM CREEK	

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
202	3194	WYNACO	7	85.60	28	195	1964	2004	168TH WY SE	COVINGTON CREEK	
203	3198	SEMANSKI	9	91.06	30	37	1963		252ND AVE SE	BOISE CREEK	
204	3201	SE 424TH ST	9	99.99	3.7	31	2011		SE 424TH ST	WATERCRESS CREEK	
205	3202	MAXWELL RD	9	42.51	24	16	1952		225TH AVE SE	CATTLE UX	
206	3205	SOOS CK	9	88.86	28	37	2009		172ND AVE SE	SOOS CREEK	
207	3216	GREEN RIVER	7	66.84	61	250	1990		83RD AVE S	GREEN RIVER	KC/Kent
208	3217	OVERFLOW CHANNEL	7	68.33	61.3	62	1990		83RD AVE S	CATTLE CROSSING	
209	3220	BLACK NUGGET BR	3	86.93	40	32	1992		BLACK NUGGET RD	N FK ISSAQUAH CREEK	
210	4001	196TH-200TH ST	5	94.20	76.4	308	1998		196TH-200TH ST	GREEN RIVER	Kent/Tukwila
211	4400	ROCK CK CULVERT	9	78.66	28	28	2003		SE 248TH ST	ROCK CREEK	
212	5003	HARRIS CK BR	3	95.94	37	80	2005		KELLY RD NE	HARRIS CREEK	
213	5005	MAY CK	9	98.15	44.9	36	2010		SE MAY VALLEY RD	MAY CREEK	
214	5007	KELLY RD	3	7.55	28	16	1959		KELLY RD NE	DRAINAGE DITCH	
215	5008	KELLY RD CHERRY CK	3	77.87	28	72	1947	2004	NE CHERRY VLY RD	CHERRY CREEK	
216	5009B	SNOQUALMIE VALLEY RD	3	56.14	24	16	1951		W SNOQUALMIE VLY R	DRAINAGE DITCH	
217	5011	WALTER SHULTS	3	67.08	18.2	26	1953	2009	NE 106TH ST	BEAR CREEK	
218	5015	LOWER SWAMP CR0.	1	7.48	24	47	1951		NE 175TH ST	SWAMP CREEK	Kenmore
219	5017	HAMLIN RD BR	1	45.85	23	16	1949		HAMLIN RD NE	MCALEER CK	Lk Forest Pk
220	5024	CARNATION FARM RD	3	95.77	36.2	60	1997		NE CARNATION FARM	SLOUGH	
221	5024A	PATTERSON CK	3	74.94	22	33	2008		264TH AVE SE	PATTERSON CREEK	
222	5028	CARNATION FARM RD SLGH	3	98.78	36	40	1998		NE CARNATION FARM	SLOUGH	
223	5032	STOSSEL CK	3	61.15	17	27	1947	1967	STOSSEL CK RD	STOSSEL CREEK	
224	5034A	LAKE JOY BR	3	74.44	24	16	1950		346TH PL NE	LAKE JOY CREEK	
225	5042	COTTAGE LAKE CK	3	94.83	38	35	1975		NE 130TH ST	COTTAGE LAKE CREEK	
226	5043	OLD NORTH BEND WAY	3	81.41	58.8	92	1941		NORTH BEND WY	KIMBALL CREEK	
227	5044	4 CK RANCH	9	85.42	35	42	1983		229TH DRIVE SE	ISSAQUAH CREEK	
228	5045	MC DONALD HIGHLAND	1	PED	9.1	90	1982		SCHOOL PED OX	NE 151 ST	Kenmore
229	5046	PRESTON FRONTAGE RD	3	89.97	31	316	1974		UPPER PRESTON RD	RAGING RIVER	
230	6002	MARYMOOR PARK BR	3	8.65	36	115	1963		NE MARYMOOR WY	SAMMAMISH SLOUGH	KC Parks
231	AUBURN01	LEVI BALLARD BR	7	54.69	35.5	250	1967		R' ST SE	STUCK RIVER	Auburn
232	AUBURN02	BNRR OVER F ST	7	RAIL	20	120	1910		BNSF RR	F ST SE	Auburn
233	AUBURN03	BNRR OVER ELLINGSON	7	RAIL	33.4	75	1974		BNSF RR	ELLINGSON ST	Auburn
234	AUBURN04	15 TH NW (UPRR OC)	7	64.39	56	228	1972		15TH ST NW	UPRR	Auburn
235	AUBURN05	15TH NW (BNRR OC)	7	69.66	56	304	1972		15TH ST NWT	BNRR & B ST NW	Auburn
236	AUBURN06	BNRR OVER AUBURN WY S	7	RAIL	160.3	161	1994		BNSF RR	AUBURN WAY S	Auburn
237	AUBURN07	BNRR OVER A ST SE	7	RAIL	34	74	1974		BNSF RR	A ST SE	Auburn
238	AUBURN08	29TH ST NW (MILL CK)	7	39.00	24.2	16	1950		29TH ST NW	MILL CREEK	Auburn
239	AUBURN10	SUPERMALL FLYOVER	7	95.71	28.8	477	1995		15TH SW TO MALL	15TH ST SW	Auburn
240	AUBURN11	3RD ST SW W-N OFF RAMP	7	91.91	30	80	2002		3RD ST SW	SOUND TRANSIT P&R ACCESS	Auburn
241	AUBURN12	3RD St SW/SB OFF RAMP	7	98.24	47	141	2002		3RD ST SW	C ST SW	Auburn

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
242	AUBURN13	3RD ST SW/BNSF OXING	7	97.34	104.5	122	2002		3RD ST SW	BNSF RR	Auburn
243	AUBURN14	3RD ST SW	7	85.06	65	69	2002		3RD ST SW	A ST SW	Auburn
244	AUBURN15	S 277TH ST OVER UPRR	7	64.63	63.5	271	2003		S 277TH ST	UNION PACIFIC RR	Auburn
245	AUBURN16	S 277TH OVER BNSF	7	86.48	75.5	142	2003		S 277TH ST	BNSF RR	Auburn
246	AUBURN17	STUCK RIVER	7	72.31	60	290	1991		A ST SE	STUCK RIVER (WHITE RV)	Auburn
247	AUBURN18	LAKE TAPPS PARKWAY	7	94.72	89	448	2003		LAKE TAPPS PARKWY	E VALLEY HIGHWAY	Auburn
248	AUBURN19	LEE HILL BR	7	75.85	58.7	219	1973		8TH ST NE	GREEN RIVER	Auburn
249	BELLEVUE1	NE 12TH ST PED BR	6	PED	12	386	1969		PEDESTRIANS	NE 12TH ST	Bellevue
250	BELLEVUE2	NE 12TH ST BR	6	78.46	72	282	1971		NE 12TH ST	PARKING LOT	Bellevue
251	BELLEVUE3	NORTHUP BR	6	68.44	56.3	63	1987		NORTHUP AVE	BNRR	Bellevue
252	BELLEVUE4	NE 12TH ST BR	6	76.94	56	232	1970		NE 12TH ST	BNRR	Bellevue
253	BELLEVUE6	140TH AVE BR	6	77.38	75.5	37	1972		140TH AVE NE	KELSEY CREEK	Bellevue
254	BELLEVUE7	MEYDENBAUER BR	6	96.96	48.3	265	2002		NE LK WASH BLVD	MEYDENBAUER BEACH PK	Bellevue
255	BELLEVUE8	148TH AVE PED BR	6	PED	10	275	1900	1975	PEDESTRIAN	148TH AVE	Bellevue
256	BELLEVUE9	FOREST DR BR	9	98.20	44.6	104	1989		FOREST DR	RAVINE	Bellevue
257	BELLEVUE10	134TH AVE NE BR	6	97.53	36	61	1987		134TH AVE NE	KELSEY CREEK	Bellevue
258	BELLEVUE11	LAKEMONT BLVD BR#1	9	8.74	45	26	1990		LAKEMONT BLVD	LEWIS CREEK	Bellevue
259	BELLEVUE12	LAKEMONT BLVD BR#2	9	75.23	62	45	1990		LAKEMONT BLVD	LEWIS CREEK	Bellevue
260	BELLEVUE13	LAKEMONT BLVD BR#3	9	78.39	53.8	99	1998		LAKEMONT BLVD	RAVINE	Bellevue
261	BELLEVUE14	LAKEMONT BLVD BR#4	9	78.39	52.8	841	1998		LAKEMONT BLVD	HILL SIDE	Bellevue
262	BELLEVUE15	CAMP SAMBICA PED UC	3	PED	7	71	1950	1984	PEDESTRIAN	WEST LK SAMM PKWY	Bellevue
263	BELLEVUE16	PHILLIPS RD	6	64.21	28	16	1964	1997	164TH PL SE	VASA CREEK	Bellevue
264	BELLEVUE17	KAMBER RD	6	93.59	72	34	2005		KAMBER RD	EAST CREEK	Bellevue
265	BELLEVUE18	COUGAR RIDGE #1	9	65.23	41.4	24	2000		163RD PL SE	WETLAND	Bellevue
266	BELLEVUE19	COUGAR RIDGE #2	9	88.25	37.5	19	2000		163RD PL SE	WETLAND	Bellevue
267	COV-1	WINGFIELD BR	9	99.99	48	54	2006		SE 261ST ST	LITTLE SOOS CREEK	Covington
268	COV-2	RAINIER VISTA BR	9	52.34	45	37	2007		184TH AVE SE	UN NAMED STREAM	Covington
269	COV-3	164TH AVE SE	9	96.97	60	20	1969		164TH AVE SE	LITTLE SOOS CREEK	Covington
270	COV-4	SE 262ND PL	9	96.99	56	17	1963		SE 262ND PL	JENKINS CREEK	Covington
271	KENT-01	SOUTH FRAGER BR	7	66.74	28	66	1950		S FRAGGER RD	UN-NAMED STREAM	Kent
272	KENT-02	NORTH FRAGER BR	7	71.54	29	78	1958		N FRAGGER RD	UN-NAMED STREAM	Kent
273	KENT-03	GARRISON CK S 218 ST	5	55.48	24	16	1952		S 218TH ST0.	GARRISON CREEK	Kent
274	KENT-04	GREEN RIVER BR	5	46.38	35.5	245	1958		MEEKER RD	GREEN RIVER	Kent
275	KENT-05	ROCK CK	9	68.53	28	16	1958		KENT KANGLEY RD	ROCK CREEK	Kent
276	KENT-06	108TH AVE BR	5	76.08	59	159	1998		108TH AVE SE	SE 274TH WAY	Kent
277	KENT-07	DON E WICKSTROM BR	7	9.70	81	467	2000		S 277TH ST	GREEN RV & GREEN RV. RD	Kent
278	KENT-08	196TH ST BR	5	77.38	68	1249	2000		S 196TH ST	UPRR, 77TH AVE S, BNSF RR	Kent
279	KENT-09	COL. JOE M JACKSON BR	7	83.26	70	356	2006		S 228TH ST	GREEN RIVER	Kent
280	KENT-10	RIVERVIEW BLVD OX	7	99.59	52	146	2007		44TH AVE S	S 231ST WAY	Kent
281	KENT-11	LAKESIDE BLVD E	7	96.92	47	22	1985		LAKESIDE BLVD E	KENT LAKES	Kent

2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
282	KENT-12	SOOS CK	9	48.74	25.2	33	1927		SE 256TH ST	SOOS CREEK	Kent
283	KENT-13	SOOS CK	9	84.74	38	30	1971		148TH AVE SE	SOOS CREEK	Kent
284	KENT-14	MILL CR	7	55.99	39.2	60	1954		SR-181	MILL CR	Kent
285	KENT-15	MILL CR	7	44.54	28.1	35	1915		W VALLEY HWY	MILL CR	Kent
286	KENT-17	GREEN R	5	68.13	4.4	275	1968		SR-181	GREEN R	Kent
287	KENT-16	212TH ST GREEN RIVER	7	62.00	56	189	1966		S 212TH ST	GREEN RIVER	Kent
288	MV-1	LAKE WILDERNESS OX	9	82.79	140	24	1996		WITTE RD	PARK TRAIL	Maple Valley
289	MV-2	GRAVEL PIT OX	9	99.92	58	17	1988		SE 231ST ST	PARK TRAIL	Maple Valley
290	MV-3	MAPLE VALLEY SE 263RD OX	9	99.99	44	18	2004		SE 263RD ST	MAPLE VALLEY TRAIL	Maple Valley
291	REDMOND-01	NE 116th ST	3	9.50	45	19	2008		NE 116TH ST	NATURAL DEPRESSION	Redmond
292	REDMOND-02	SAMM RIVER PED BR	3	PED	13.8	116	2004		SAMM RIVER TRAIL	SAMMIMISH RIVER	Redmond
293	REDMOND-04	NOVELTY HILL	3	83.96	38	32	1974		NOVELTY HILL RD	BEAR CREEK	Redmond
294	REDMOND-05	BEAR CK	3	64.33	24.1	20	1951		NE 95TH ST	BEAR CREEK	Redmond
295	REDMOND-06	NE 90TH ST	3	64.66	77	220	2001		NE 90TH ST	SAMMAMISH RIVER	Redmond
296	REDMOND-07	148TH AVENUE BR	3	8.89	62.5	505	1991		148TH AVE SE	HILLSIDE	Redmond
297	REDMOND-08	NE 85TH BR	3	97.97	68	178	1985		NE 85TH ST	SAMMAMISH RIVER	Redmond
298	REDMOND-09	BEAR CK BR	3	81.18	72	52	1979	1988	AVONDALE RD	BEAR CREEK	Redmond
299	REDMOND-10	UNION HILL BR	3	79.50	78.5	114	1994		UNION HILL RD	BEAR CREEK	Redmond
300	REDMOND-11	SIXTY-01 UXING	3	74.16	56.3	36	1970		OLD REDMOND RD	PRIVATE ROAD	Redmond
301	REDMOND-12	154th AVE NE RR OX	3	PED	16.6	168	1960		ANNEXED RAIL LINE	154TH AVE NE	Redmond
302	REDMOND-13	BNSF OX SAMMAMISH RV	3	PED	15	224	1922		ANNEXED RAIL LINE	SAMMAMISH RIVER	Redmond
303	REDMOND-14	BN RR UC	3	PED	7.8	127	1972		BNSF RR	SR-908	Redmond
304	REDMOND-15	REDMOND WY/W SAM PKWY	3	76.98	79	85	1992		REDMOND WY	W SAMMAMISH PKWY	Redmond
305	REDMOND-16	SAMMAMISH R	3	76.93	65	197	1972		REDMOND WY	SAMMAMISH RV	Redmond
306	REDMOND-17	LEARY WAY BR	3	77.63	64	114	1992		LEARY WY	SAMMAMISH RV	Redmond
307	REDMOND-18	ADELAIDE BR	3	95.31	70	9	1996		E LK SAMM PKWY NE	187 AV NE	Redmond
308	RENTON-01	LAKE WASHINGTON BLVD	5	96.47	43.8	62	1996		LK WASHINGTON BLVD	MAY CREEK	Renton
309	RENTON-02	LOGAN AVENUE BR	5	71.90	86	200	1973		LOGAN AVE	CEDAR RIVER	Renton
310	RENTON-03	WILLIAMS AVENUE BR	5	56.30	35	155	1954		WILLIAMS AVE	CEDAR RIVER	Renton
311	RENTON-04	WELLS AVENUE BR	5	8.26	42	138	1987		WELLS AVE	CEDAR RIVER	Renton
312	RENTON-05	HOUSER WAY BR	5	54.24	31.6	141	1960		HOUSER WY	CEDAR RIVER	Renton
313	RENTON-06A	HOUSER WAY PED BR	5	PED	7	142	1972		HOUSER WY	CEDAR RIVER	Renton
314	RENTON-13	SW GRADY WAY CLVT	5	77.98	196	61	1987		SW GRADY WY	SPRINGBROOK CREEK	Renton
315	RENTON-14	SW 16TH ST BR	5	82.60	58	63	1991		SW 16TH ST	SPRINGBROOK CREEK	Renton
316	RENTON-15	SW 43RD ST CULVERT	5	66.00	56	22	1983		SW 43RD ST	SPRINGBROOK CREEK	Renton
317	RENTON-18	SW 27TH ST BR	5	8.78	91.4	31	2000		SW 27TH ST	SPRINGBROOK CREEK	Renton
318	RENTON-19	OAKESDALE AVE SW CLVT	5	8.22	55	33	1979		OAKESDALE AVE SW	SPRINGBROOK CREEK	Renton
319	RENTON-20	LIND AVE SW CULVERT	5	68.59	55	30	1981		LIND AVE SW	P9 CHANNEL/PANTHER CK	Renton
320	RENTON-23	NE 31ST ST BR	5	44.57	24.5	32	1950	1978	NE 31ST ST	MAY CREEK	Renton
321	RENTON-24A	NE 31ST ST CULVERT	5	17.34	20	11	1950		NE 31ST ST	MAY CREEK	Renton

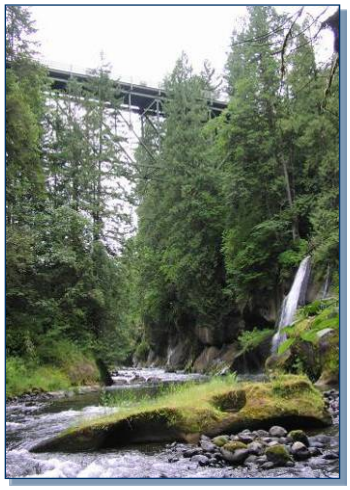
2013 King County Bridge Inventory - Appendix One

No.	Bridge Number	County Bridge Name	County Council District	Suff Rating (SR)	Width	Length	Year Built	Year Rebuilt	Facilities Carried	Feature Bridge Crosses	Jurisdiction
322	RENTON-25	OAKESDALE AVE SW BR	5	79.28	54	193	1987		OAKESDALE AVE SW	BLACK RIVER DRAIN	Renton
323	RENTON-27	S 43RD ST BR	5	8.31	105	35	1992		SOUTH 43RD ST	HOSPITAL ACCESS ROAD	Renton
324	RENTON-28	MONSTER RD SW BR	5	81.96	46	187	1998	2005	MONSTER RD SW	BLACK RIVER CHANNEL	Renton
325	RENTON-29	OAKESDALE AVE EXT BR	5	75.57	8.8	137	1998		OAKESDALE AVE SW	SPRINGBROOK CREEK	Renton
326	RENTON-30	N 27TH PLACE BR	5	99.86	48	20	2000		N 27TH PLACE	KENNYDALE CREEK	Renton
327	RENTON-31	N 40TH PLACE BR	5	99.99	4.5	86	2007		N 40TH PLACE	MAY CREEK	Renton
328	RENTON-32	SW 34TH ST BR	5	8.73	65.3	32	2007		SW 34TH ST	SPRINGBROOK CREEK	Renton
329	RENTON-34A	ELMA PLACE NE BR	5	89.67	46	15	2005		ELMA PLACE NE	HONEY CREEK	Renton
330	RENTON-40A	S 55TH ST CULVERT	5	94.63	60	12	2012		S 55TH ST	UPPER SPRINGBROOK CK	Renton
331	RENTON-72A	MAY CK	9	53.59	24	16	1951		148TH AVE SE	MAY CREEK	Renton
332	SAMMAM-01	BEAVER LAKE TSTL	3	85.40	42.5	389	1968	1994	SE 24TH ST	SLOUGH	Sammamish
333	SAMMAM-03	INGLEWOOD	3	84.99	53	63	1961	2010	E LAKE SAMMAMISH	DRAINAGE DITCH	Sammamish
334	SAMMAM-02	244TH AVE NE	3	97.28	45	604	2010		244TH AVE NE	WETLAND	Sammamish
335	SKYKOM-10	MALONEY CK	3	96.67	36.3	54	1982		OLD CASCADE HWY	MALONEY CREEK	Skykomish
336	TUKWILA-01	MACADAM RD	5	8.64	39.8	63	1997		MACADAM RD S	S 133RD	Tukwila
337	TUKWILA-02	FRANK ZEPP BR	5	73.95	87	192	1968	1995	S 180TH ST	GREEN RIVER	Tukwila
338	TUKWILA-03	LOIS T NEWTON	5	83.94	67.2	206	1973		STRANDER BLVD	GREEN RIVER	Tukwila
339	TUKWILA-05	SC BLVD, GREEN RIVER BR	5	95.32	71.8	245	1994		SOUTHCENTER BLVD	GREEN RIVER	Tukwila
340	TUKWILA-06	FOSTER 56 AVE SO	5	60.00	35.5	244	1985		56TH AVE S	DUWAMISH RIVER	Tukwila
341	TUKWILA-07	51ST AVE SOUTH	5	8.09	40	222	1996		51ST AVE S	154TH ST	Tukwila
342	TUKWILA-08	GRADY WAY	5	67.49	61.5	1205	1986		GRADY WY	UPRR & BNRR	Tukwila
343	TUKWILA-09	EAST MARGINAL WAY	5	9.07	61.5	272	1989		EAST MARGINAL WY	DUWAMISH RIVER	Tukwila
344	TUKWILA-11	S BAR OVER AIRPORT WAY	5	57.98	65.7	182	1952		S BOEING ACCESS RD	AIRPORT WAY BAR RAMP	Tukwila
345	TUKWILA-12	S BAR OVER BNRR	5	83.09	82	337	1945	1966	S BOEING ACCESS RD	BNRR	Tukwila
346	TUKWILA-13	BEACON AVE SO	5	59.25	43.8	70	1971		BEACON AVE S	S RYAN WY	Tukwila
347	TUKWILA-14	42ND AVENUE SOUTH BR	5	66.89	30	284	1949		42ND AVE S	DUWAMISH RIVER	Tukwila
348	TUKWILA-15	TUKWILA INTL BLVD	5	86.43	81.5	219	2000		TUKWILA INTL BLVD	DUWAMISH RIVER	Tukwila
349	TUKWILA-16	SO 118TH PED	5	PED	7	233	1965		SO 118TH PED	DUWAMISH RIVER	Tukwila
350	TUKWILA-17	FOSTER GOLF COURSE PED	5	PED	14	195	1987		PEDESTRIAN	GREEN RIVER	Tukwila
351	TUKWILA-18	GREEN RIVER PED & UTILITY	5	PED	11.8	172	1983		UTILITIES	GREEN RIVER	Tukwila
352	TUKWILA-19	INTERURBAN TRAIL BR	5	PED	13.7	170	2006		INTERURBAN TRAIL	GREEN RIVER	Tukwila
353	TUKWILA-20	180TH PEDESTRIAN BR	5	PED	12	70	2001		INTERURBAN TRAIL	S 180TH ST	Tukwila
354	TUKWILA-21	FORT DENT PARK BR	5	47.23	34	203	1975		STARFIRE WY	GREEN RIVER	Tukwila
355	TUKWILA-22	FORT DENT TRAIL BR	5	PED	11	193	2002		PEDESTRIAN	GREEN RIVER	Tukwila
356	TUKWILA-24	KLICKITAT BR	5	92.31	100	31	2012		KLICKITAT DR	SB SOUTHCENTER PKWY	Tukwila

Appendix Two - King County Landmark Bridges

This is a list of King County bridges designated by the King County Landmarks Commission as Landmark Bridges.

Miller River Bridge No. 999W
Built in 1922 on Old Cascade Scenic Highway, Skykomish vicinity. Designated in 1999.



Green River Gorge Bridge No. 3032
Built in 1914, spanning the Green River in southeast King County. This is a rare and intact example of the Baltimore Petit deck truss structural design. The Green River Gorge Bridge is the only Baltimore Petit deck truss bridge owned and maintained by King County. Designated in 2004.

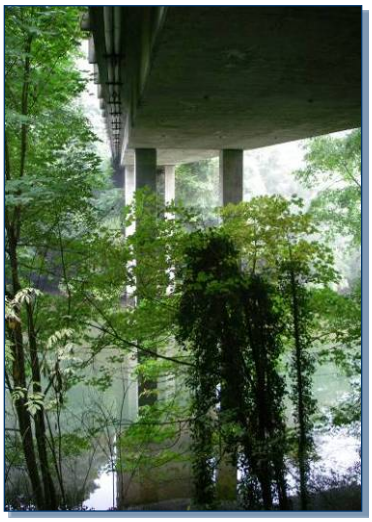
Stossel Bridge No. 1023A
Built in 1951, spanning the Snoqualmie River near Carnation Farms north of Carnation. Listed on the Washington Historic Registry in 2002. Designated in 1997.

Raging River Bridge No. 1008E
Built in 1915, this bridge spans the Raging River between the communities of Fall City and Preston. It is a concrete earthen filled arch structure. Originally built to carry the Sunset Highway across the Raging River. Designated in 1997.

Appendix Two - King County Landmark Bridges

Baring Bridge No. 509A
Built in 1930, spanning Index Creek at Northeast Index Creek Road, vicinity of Baring. Designated in 1999.

Patton Bridge No. 3015
Built in 1950, spanning the Green River in the vicinity of Auburn. A rare and early example of innovative structural design associated Hadley. In 1995, the Patton Bridge was listed in the National Historic Places and the Washington Heritage Registry. Designated in 2004.



Judd Creek Bridge No. 3184
Built in 1953 on Vashon Island. A concrete hollow-box (box girder) bridge associated with Homer M. Hadley. Designated in 2004.

Foss River Bridge No. 2605A
Built in 1951, spanning a tributary to the Skykomish River in northeast King County. This Warren pony truss was added to the National Historic Registry in 2002. Designated in 2004.